

**Abstract.** *The article aims to determine if the economic and business higher education institutions contributes to the creation of the future knowledge worker that organizations need in the new economy.*

*In order to achieve this goal a case study was developed. After analyzing the number of graduates, reputation and experience of all the 15 faculties of economics registered in Romania, we selected the Faculty of Economics and Business Administration from "Alexandru Ioan Cuza" University of Iași to be the unit of analysis. This is one of the oldest economic higher education institutions, has almost 2000 graduates per year and is the third provider of economists for labor market.*

*We applied a content analysis to 108 courses taught to undergraduates in Faculty of Economics and Business Administration from "Alexandru Ioan Cuza" University of Iași. The matters of investigation were the education goals, practical assignments topics, and teaching and evaluating methods.*

*Conclusions showed that the courses taught to the undergraduates' level are not oriented towards teamwork, communication, and use of information technologies. As a consequence, the graduates will not be able to respond efficiently to knowledge economy challenges and will represent a vulnerability for the organization because they will be "one step behind" what's happening on the market.*

**Keywords:** economic higher education, human resources, knowledge economy, knowledge worker, teamwork skills.

## **CREATING THE FUTURE KNOWLEDGE WORKER**

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## 1. Introduction

Against the backdrop of globalization, the development of information and communication technologies (ICT) and the emergence of a new production factor – knowledge – the business rules and the terms for competitiveness' definition have radically changed. The new state of the economies that features a faster pace of information traveling from one continent to another in few milliseconds, a faster occurrence of innovation, a faster obsolescence of equipments, consumers are increasingly doubtful and a diminished life time of the competitive advantage, is called knowledge economy.

In a context in which knowledge is consider "*the most critical resource in any developing country*" (Millar, Choi, 2010, p. 760), the business environment becomes unpredictable and the traditional models for anticipating and adapting to the market evolution are demonstrating its limitations. As a result, the attention is moved towards knowledge owners – human resources. Once again, its importance in the organizational environment it's highlighted.

The new state of economy reflects the fact that any company may face the challenges induced by the unpredictable environment only if it knows how to develop and use its knowledge workers. Only through the human resources' knowledge and skills all the other resources may be transformed, value may be added to the company and sustainable competitive advantages may be obtained.

But what makes a knowledge worker so special and how can he/she develop his/hers skills?

In an attempt to highlight the specificity of a knowledge worker, Peter Drucker (1969) compares him with a manual worker. He sustained that the main difference between these two types of workers is given by the skills used in their current activity. So, in his activity, a knowledge worker uses predominantly his cognitive skills, while the manual worker usually uses his motor skills.

If we take this difference into consideration than we may sustain that economists are knowledge workers. But are they developing the necessary skills during their studies or the company in which they will be employed have to invest in special programs in order to "transform" them in knowledge workers? In other words, do the economic and business higher education institutions manage to contribute to the creation of the knowledge workers that any organization needs in order to survive in this new economy or they are delivering to the labor market a human resource very well prepared which has a lack of skills?

In order to offer an answer to this question the article was organized in five parts. The *Introduction* part presents in a concise manner the changes that appeared in the business environment and states the problem which is investigated. The second part of the article describes the role of higher education institutions in knowledge economy while the third section presents the methodology used in the research. The fourth part of the article describes the research results obtained after analyzing 108 courses taught at the Faculty of Economics and Business Administration from

“Alexandru Ioan Cuza” University of Iași, the third provider of economists to the labor market. The last section offers a few concluding observation regarding the contribution of the Faculty of Economics and Business Administration from “Alexandru Ioan Cuza” University of Iași, in particular, and of the economic and business higher education institutions, in general, to the creation of the future economists as knowledge workers.

## 2. The role of higher education in knowledge economy

In 1966, Peter Drucker used the term „knowledge economy” to define *„a concept that refers to using knowledge in order to produce benefits”* (Drucker, 1969, p. 243).

Half centuries later the opinions about the meaning of knowledge economy are still divergent. Some authors focus on the procedural dimension of knowledge, considering it an effect of information processing and a cause of technologies development – while others acknowledge it as an economic asset.

Thus, the Organization of Economic Cooperation and Development (OECD) focus on the element behind knowledge – information – and the generated outputs – technologies. Therefore, it presents the knowledge economy as being a specific element of those countries where *“the production, dissemination and use of technology and information are the key to sustainable economic activity and growth”* (OECD, 1999, p. 7).

In addition, attempting to capture the essence of the concept introduced by Peter Drucker, Ovidiu Nicolescu argues that knowledge economy *“is characterized by transforming knowledge into raw material, capital, products, and production key factors, and by economic processes where knowledge generating, selling, buying, learning, storing, developing, sharing and protecting become a predominant and decisive condition”* (Nicolescu, 2005, p. 48).

Starting from these definitions, we sustain that knowledge economy is a specific element of those countries in which information are traveling fast from one user to another, ICT’s are used for individual, organizational and public purpose, knowledge creation and dissemination are encouraged at the individual, organizational and inter-organizational level and last but not least, knowledge is incorporated in products, services, processes and business relationships.

On the other hand, knowledge economy may be seen as the development stage that succeeds to industrial economy. Some of the most important differences between these two are presented in Table 1.

Table 1

Differences between industrial and knowledge economy

	Industrial economy	Knowledge economy
The character of resources	Limited	Unlimited
The effect of localizations	Increased	Diminished
The applicability of laws, barriers and taxes	Easy	Difficult
The report between tangible and intangible assets embedded in products and services	Supraunitar	Subunit
The importance of including knowledge in processes and systems	Low	High

**Source:** Olssen, M., Peters, M. (2005), "Neoliberalism, higher education and the knowledge economy: from the free market to knowledge capitalism", *Journal of Education Policy*, **20**(3), p. 332.

First of all, we must observe that the main difference is based on the elements that are included in the resources category. Thus, in the industrial economy only three elements were considered to be resources from an economical perspective, namely: land, labor and capital. All these had a limited character because of the fact that they could be easily finished if they were used in an irresponsible manner.

In the next case – the one of knowledge economy – a new resource was added to the traditional ones – knowledge. Despite land, labor and capital, this is unlimited because is born from information used in a specific context and as a result, it has the capacity to reproduce itself and change its meaning when the context is changed.

The next differences are correlated with the first one and are based on resources' nature. For example, in the industrial economy the effect of localization is increased because of the fact that resources cannot be transferred from one place to another without raising the business costs. On the other hand, this inconvenient had disappeared in the knowledge economy where the motto of any company is "*think local, act global*". Besides that, knowledge is the main resource and it can easily be transferred using information and communication technology with significantly reduced costs.

Another difference that exists between industrial and knowledge economy focus on the applicability of laws, barriers and taxes. The development level of these ones is once again influenced by the resources used in the business environment. Thus, defining and establishing laws, barriers and taxes for any activity that was resuming to the use of labor, capital and land was an easy job because the effects of that action were easily to identify, measure and control. The situation changes when it comes to knowledge. These are dynamic, always changing and adapting to the new demands, are difficult to measure itself or its contribution to organization's success. And if we cannot measure it than how can we control it by defining and applying a set of laws, barriers and taxes?

In these circumstances, we consider that knowledge economy is a complex and uncertain environment in which performance may be obtained only through *“the skills and innovation level of the labor force”* (Tennant, 2004, p. 431).

Beside all these, we must observe that human resources' importance is higher in the knowledge economy than in the industrial one. This situation appears because of the fact that in the industrial economy, the role of employees was recognized but they were analyzed only based on their contribution to the company success, contribution that resulted from the use of their motor skills. In the knowledge economy, workers *“are dealing with information and knowledge process and changed the mechanical equipment with highly sophisticated IT”* (Brătianu, 2011, p. 27, Brătianu & Orzea, 2010). In other words, they became the main source of sustainable competitive advantage thanks to the knowledge, skills and abilities exploited in organizations.

But where are these skills and abilities developed? Should any company invest in programs that are focusing on transforming the manual worker into a knowledge one or the higher education institutions should facilitate this transition?

If we take into account the specificity of the new economic environment than we can agree with the authors who sustained that *„universities have become power drivers of change and are critical to local and regional development because they produce people with knowledge and skills, generate new knowledge and import it from diverse sources and apply knowledge in a range of environments”* (Bosetti & Walker, 2010, p. 15). In other words, the higher education institutions are the ones that are creating the future knowledge workers who are going to become a part of the economic environment once they will come out on the labor market.

So the importance of the higher education institutions in the knowledge economy is growing fast because it is not only influences the individual's life but also the organizational and national economic performance. As a result, in order to be efficient and to assume its responsibility in front of individuals, organizations and the whole business environment, the higher education institutions should emphasize not only the acquisition of knowledge but also the development of communicational and interpersonal skills.

In this context, economic and business higher education must be oriented towards developing graduates capable to adapt to the requirements of a rapidly changing working environment. So, the courses taught should not be confined only to the transmission of basic economic knowledge but also to the creation of skills which will allow the future graduates to express themselves, to make oral presentation, to write a report or a business letter.

The future graduates should be able to use what they have learned during their studies, should be capable of sharing information with others and adapting to the challenges that are currently appearing in a dynamic environment like the one that characterizes the knowledge economy.

Last but not least, in the context of the new economy, the higher education institutions should teach students how to apply what they learn, how to make the professional knowledge circulates in the interactions they initiate with others and how

to incorporate what they know in organizational products, services, products and business relationships.

### 3. Methodology

The purpose of the article is to determine if economic and business higher education institutions contributes to the creation of the future knowledge worker that organizations need in the new economy. In other words, will the future economists be knowledge workers capable of adapting to a changing world or they will represent a weakness of the organizational environment because of their lack of skills?

The specific objectives that had been taken into account were:

- to identify the most important skills of a knowledge worker,
- to define the image of the employee that any company that operates in a knowledge economy looks for;
- to determine the elements upon which the courses taught to the undergraduates' level are focusing on,
- to identify the skills developed through the undergraduate studies.

The research strategy developed in order to achieve these objectives was represented by a case study. The unit of analysis has been selected based on the number of graduates, reputation and experience of the economic and business higher education institution and the ease access to data. As a result, from a range of 15 faculties of economics registered in Romania, we selected the Faculty of Economics and Business Administration from "Alexandru Ioan Cuza" University of Iași.

This is one of the most dynamic faculties as far as educational programs, number of students, preparation of professors and modern studying environment is concerned. It became part of the "Alexandru Ioan Cuza" University structure in 1962 and marked the beginning of today's famous "Iași economy school". In 1999, this institution changed its name from the Faculty of Economic Science into the Faculty of Economics and Business Administration and in 2005, adopted the Bologna system in order to meet the increasingly dynamic labor market requirements and to give students greater freedom in choosing the route of their specialization studies.

The educational offer of this faculty follows two major directions: *economic science* – focused on the economy theories and the business environment – and *public administration* – oriented towards developing the future civil servants. Because of the programs that had been developed on both directions the Faculty of Economics and Business Administration from "Alexandru Ioan Cuza" University of Iași gained a good reputation in the higher economic education in Romania.

As a proof for its good reputation, the Faculty of Economics and Business Administration from "Alexandru Ioan Cuza" University of Iași has almost 2000 graduates per year and may be consider the third economists provider to the national labor market. The first place is occupied by the Academy of Economic Studies from Bucharest which offers, every year, more than 4000 economists to the labor market.

On the second place we may find the Faculty of Economics and Business Administration from “Babeş – Bolyai” University of Cluj-Napoca from which almost 2040 economists graduate every year.

The research was based upon the specialist literature and the content analysis of the courses files that students learn during undergraduate studies. The main instruments used in this research were systematization, charts and tables.

In a first stage, it have been made an analyze of the specialist literature, studies and articles published in EBSCO, Science Direct and Emerald Databases in order to identify the characteristics of the knowledge worker, the role of higher education institutions in the new economic context and the most important skills and abilities that human resources have to have it in order to add value to the organization.

All this information had been used for defining the profile of the future knowledge worker that any economic and business higher education institution should develop.

In the second stage, the content analysis had an important role. We had analyzed 108 files of the courses that are taught to the undergraduate students from the Faculty of Economics and Business Administration from “Alexandru Ioan Cuza” University of Iași in order to identify the skills and competencies that students will develop during their studies. We had taken into consideration only the disciplines from the Economic Science profile because we wanted to outline the “real” image of the future economist. The matters of investigation were education goals, practical assignments topics, teaching and evaluating methods.

The education goals were analyzed from the perspective of the future knowledge worker profile which had been outlined in the previous stage. In other words, the skills and competence that the business environment needs in the context of the knowledge economy have been searched through the skills and competence that the disciplines taught in Faculty of Economics and Business Administration from “Alexandru Ioan Cuza” University of Iași aims to develop.

Practical assignment topics and teaching and evaluating methods have reflected if the education goals are translated into reality or they remain at a declarative stage.

After all these activities, we have obtained a “real” imagine of the human resources that the Faculty of Economics and Business Administration from “Alexandru Ioan Cuza” University of Iași offers to the labor market.

Subsequently, a comparison was made between the “ideal” profile of the future knowledge worker and the “real” one – created at the Faculty of Economics and Business Administration from “Alexandru Ioan Cuza” University of Iași. Based on the similarities between these two profiles we had decided whether the economic and business higher education institutions contributes to the creation of the future knowledge worker that any organization needs in times marked by uncertainty or not.

#### 4. Research results

After analyzing the studies and articles published in EBSCO, Science Direct and Emerald Databases from 1997 until 2011, we discover that the economic and business higher education is oriented towards creating specialized knowledge. In other words, the educational programs are still focusing on the acquisition of knowledge and not on learning the future graduates how to use what they know. The teaching efforts are still oriented towards explicit knowledge even though in the current economy the tacit knowledge is the one that makes the difference.

Given the complexity and uncertainty of the current business environment (Audia et. al., 2000, Brătianu & Vasilache, 2009, Babüroglu et. al., 2010, Narula & Upadhyay, 2010), creating knowledge is not enough. As a result, the economic and business higher education should not focus only on managing and disseminating basic knowledge about economic phenomena and specialized knowledge (Hargreaves, D.H., 1999, Jenks, C.L., 2004) but also on developing a series of skills and abilities that will help any graduate to transpose his/hers knowledge into practice.

The skills and abilities that the future economists should develop during their studies are presented in Table 2.

*Table 2*

**The skills and abilities that future economists should develop during their studies**

Author	Year	Skills and abilities
Dunne, E. et. al.	1997	<ul style="list-style-type: none"> <li>• communication skills;</li> <li>• study skills;</li> <li>• problem – solving;</li> <li>• political and economical literacy;</li> <li>• using ICT;</li> <li>• networking;</li> <li>• coping with uncertainty.</li> </ul>
Hargreaves, D.H.	1999	<ul style="list-style-type: none"> <li>• flexibility;</li> <li>• networking;</li> <li>• creativity;</li> <li>• learning skills.</li> </ul>
Jenks, C.L.	2004	<ul style="list-style-type: none"> <li>• critical thinking;</li> <li>• creativity;</li> <li>• sensitivity;</li> <li>• respect;</li> <li>• appreciation of other points of view;</li> <li>• interacting and working cooperatively and productively with others.</li> </ul>
Johnson, D.	2006	<ul style="list-style-type: none"> <li>• <i>technology skills</i> (using informational and communicational technology in order to collaborate, learn, solve problems,</li> </ul>



### Creating the future knowledge worker

Author	Year	Skills and abilities
		make decisions, construct models, produce creative works and interact with peers, experts and other audience), <ul style="list-style-type: none"> <li>• <i>information problem-solving skills and higher-order thinking skills</i> (seeking information, using information creatively, demonstrate, interpret, analyze, compare, estimate),</li> <li>• <i>conceptual skills</i> (seeing the large picture, synthesizing information, being empathetic).</li> </ul>
Brătianu, C., Shook, C.L.	2006	<ul style="list-style-type: none"> <li>• critical thinking,</li> <li>• strategic analysis.</li> </ul>
Lindberg, M.E.	2008	<ul style="list-style-type: none"> <li>• risk-taking;</li> <li>• teamwork skills;</li> <li>• flexibility;</li> <li>• strategic analysis.</li> </ul>
Uluorta, H., Quill, L.	2009	<ul style="list-style-type: none"> <li>• flexibility;</li> <li>• risk-taking;</li> <li>• use of ICT;</li> <li>• innovation;</li> <li>• learning skills.</li> </ul>
Sahlberg, P., Boce, E.,	2010	<ul style="list-style-type: none"> <li>• broad cognitive learning,</li> <li>• communication and collaborative skills,</li> <li>• risk-taking,</li> <li>• creativity,</li> <li>• innovation.</li> </ul>

So, based on the information presented in Table 2 we may outline the “ideal” image of a future economist, after graduating an economic and business higher education institution. This portrait includes professional knowledge (basic knowledge of economic phenomena and specialized knowledge which comes from the management/marketing/economics/trade/services/tourism/international affairs/accounting field) and a great number of skills. The most important ones – if we take into consideration the appearance frequency in the analyzed articles – are:

- *learning skills* – which will help the future economist to keep in touch with what is happening in the real world and, on the same time, will facilitate his adaptation to a rapidly changing environment;
- *technology skills* – which will help the future economist to obtain, disseminate and process information;
- *problem – solving skills* – which will reflect his/hers capacity of seeking and using information with a very well defined goal and his/hers ability of finding a proper solution;
- *teamwork skills* – which will facilitate the knowledge creation, acquisition and dissemination;

- *communication skills* – which will offer possibility for the future employee to express himself/herself in front of a smaller or bigger audience, in a written or orally manner;
- *risk-taking* – which will put under light the graduate's capacity of predicting what is going to happen in the economic environment, his/hers ability to look behind the appearance and to respect deadlines;
- *critical thinking* – which will reflect graduate's capacity of analysis and synthesis complex information and his/hers ability of analyzing the same situation from different perspectives.

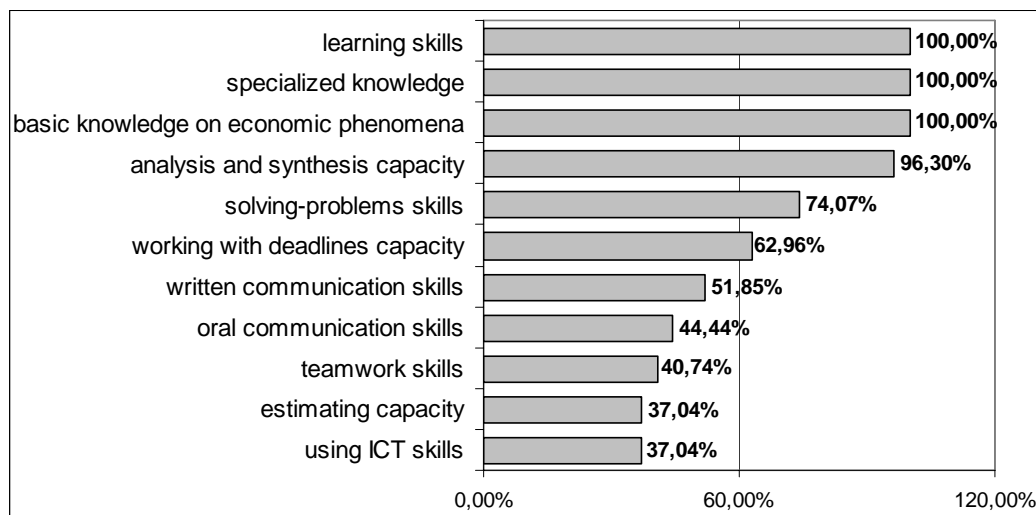
From a theoretical perspective, the graduates of an economic and business higher education institution will be prepared to face challenges of the new economy because they will have the knowledge that they need in order to do their job and they will have all the necessary skills for anticipating the changes and adapting fast to the new conditions.

But is the “ideal” profile the same with the real one? Is the Faculty of Economics and Business Administration from “Alexandru Ioan Cuza” University of Iași – the third provider of economists to the labor market – really creating this kind of knowledge workers?

We wanted to find out the answers to these questions by analyzing the education goals, practical assignments topics, and teaching and evaluating methods that the courses taught at the Faculty of Economics and Business Administration from “Alexandru Ioan Cuza” University of Iași take into account.

As it can be seen in Figure 1, most disciplines aim to create/develop basic knowledge about economic phenomena (100%), to build specialized knowledge (100%), to develop learning skills (100%), the capacity of analysis and synthesis (96.30%), to form problem – solving skills (74.07%) and to create the capacity of working with deadlines (62.96%).

Building the basic knowledge about the economic phenomena is the main objective of the disciplines that are taught during the first year of study while developing knowledge and creating the specialized ones are the fundamental purpose of the disciplines that students are starting to study from the second year.



*Figure 1. Education goals' distribution of the courses taught to undergraduates in Faculty of Economics and Business Administration*

On the other hand, it appears that all the 108 disciplines taught to the undergraduates' level are focusing on developing students' learning skills. In other words, they are preparing the future graduate for a rapidly changing environment by teaching them that learning is continuous process and in order to adapt and be successful they must always be informed.

In these circumstances, we may sustain that, in terms of education goals, the courses taught in Faculty of Economics and Business Administration from "Alexandru Ioan Cuza" University of Iași tend to adapt to the demands of the new economic environment. In other words, in order to help organizations adapting to the challenges induced by the knowledge economy, this higher education institution intends through its educational program to provide human resources who know what to do (have the explicit knowledge which is required in order to work in the specific field), are capable of learning, may extract the essential from a complex situation and, in the same time, may solve difficult problems.

Despite all these there are a couple of vulnerabilities which are targeting communication, forecasting and the use of ICT. These represent the basic elements in an economic environment which is characterized by interdependences, increased informational flows and uncertainty.

So, although world's economies are increasingly interlinked and the inter-organizational and inter-human relationships are becoming more dependent on ICT, only 37.04% of the analyzed disciplines seem to be concern about teaching students how to use ICT in a productive way. Most of them are taught to students from the Accounting and Information Management field and to the ones from the Economic Informatics field. For students who attend courses from other fields, the using of ICT

skills are reduced on learning how to work with programs from the Microsoft Office package and SPSS.

Other vulnerability arises from the little attention that is paid to activities that should develop the ability to predict what will happen in the economic environment. Thus, only 37.04% of the analyzed disciplines aim to develop students' ability to look to the future and to try to predict how the market will evolve. As a result, they will be people of the present that will act and decide based on what happened in the past and what is happening on the future. They will not be able to anticipate what is going to happen, how will the markets going to evolve and all these will transform them in workers with no vision. In these circumstances, because of the fact that they will not be capable of creating an image of the future they will affect the organizational performance. Instead of contributing to company's success, the future economists will make the company vulnerable in front of its competitors.

On the other hand, although communication is the cornerstone of any business relationship and has an essential role at the organizational level, 51.85% of the analyzed courses aim to develop written communication skills while 44.44% focuses on the oral communication skills. From this point of view it can be argued that graduates from these educational programs will fail to share with others what they know. In other words, they will find it difficult to write a project, a report or even a business letter. They will also encounter problems when they will have to present an idea at a meeting, to make a proposal to a colleague or to a superior, and even when they will have to sell a product/service to a potential client.

The lack of interest regarding communication skills is also reflected in the reduced interest on developing teamwork abilities. Only 40.74% of the analyzed courses focus on these ones. Thus, although organizational activities begin to rely on multifunctional teams, educational programs are still focusing towards the individual as the sole factor of production.

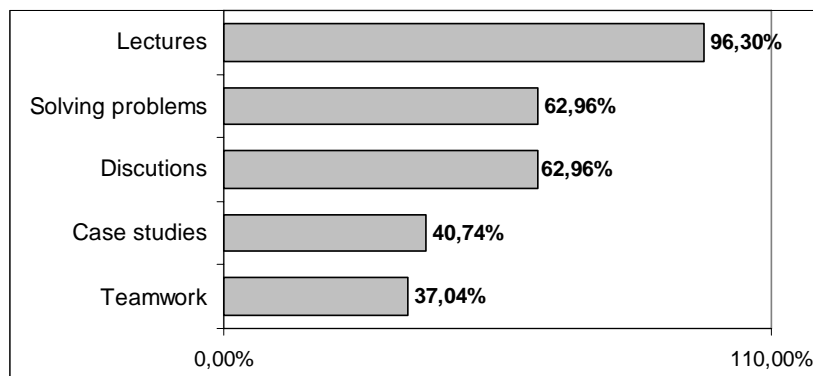
Given the fact that the themes of practical assignments are developed so that they meet the educational objectives, it can be declared that the Faculty of Economics and Business Administration from "Alexandru Ioan Cuza" University of Iași provides to the labor market a qualified human resource that is unable to put its own intellectual heritage in value. In other words, graduates possess the necessary knowledge, can solve specific issues from the field in which they are specialized and can extract the substance of a complex situation. The problem is that they are going to do all these by themselves. This situation will affect the organizational performance and their professional life because in the knowledge economy communication facilitates the creation and dissemination of knowledge. Thus, employees will fail to show others what they know and they will not have access to the knowledge possessed by their colleagues. As a result, they will record a lower level of performance of their work and the organization will fail to adapt to the changing world in which activates.

On the other hand, the future employees will be "people of the present" in a context where a short, medium and long term vision is vital. They will guide

themselves by the “here and now” principle since they will not have very well developed the ability of forecasting what is going to happen on the market.

All these elements are sustained by the teaching and evaluating methods used during courses and seminars.

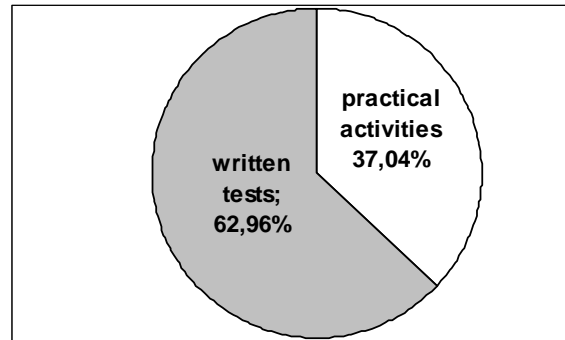
According to data presented in Figure 2, 96.30% of the analyzed disciplines focus on lecture and only 37.04% are using teamwork activities. In other words, courses and seminars are concerned with transmitting the information and not with highlighting how knowledge is applied. Despite all these, 62.96% of the disciplines are preoccupied with solving problems and discussions. So, the teaching methods used in courses and seminars facilitate the creation and disseminations of explicit knowledge without taking into consideration the tacit ones.



*Figure 2. The main teaching methods used during the courses and seminars in Faculty of Economics and Business Administration*

Only 40.74% of the disciplines are concerned with the caseload. This allows students to look beyond the theoretical, explicit knowledge and understand how these are working in an organizational environment, generating tacit knowledge and know-how. On the other hand, allows the development of critical thinking, analysis and synthesis capacity and teamwork skills.

The strongest orientation towards the creation of explicit knowledge is emphasized in Figure 3. So, for 62.96% of the examined disciplines the importance of written tests is higher than 50% in final grade. These tests capture only the explicit knowledge acquired during the courses and seminars activities and don't take into consideration the skills, abilities and competences that students had developed during their studies. Only for 37.04% of the courses, the practical activities have a share greater than 50% in the final grade.



*Figure 3. The main evaluating methods used in the Faculty of Economics and Business Administration*

Comparing the “real” and the “ideal” profile of the future knowledge worker (Table 3), it reveals that graduates from the Faculty of Economics and Business Administration from “Alexandru Ioan Cuza” University of Iași have at least 50% of the ideal knowledge worker characteristics, no matter the field in which they are specialized in. The similarities between ideal and real profile are represented by the next seven characteristics: basic knowledge of economic phenomena, specialized knowledge, learning skills, problem – solving skills, the capacity for analysis and synthesis, the capacity to work with deadlines, critical thinking.

*Table 3*

**Comparative analysis between the “ideal” profile of the knowledge worker and the “real” one developed by the Faculty of Economics and Business Administration**

Characteristics	Ideal profile	Real profile
basic knowledge of economic phenomena;	+	+
specialized knowledge	+	+
learning skills	+	+
using ICT skills	+	-
problem – solving skills	+	+
teamwork skills	+	-
written communication skills	+	-
oral communication skills	+	-
the capacity for analysis and synthesis	+	+
the capacity to predict what may happened in the economic environment	+	-
the capacity to work with deadlines	+	+
risk tolerance	+	-
critical thinking	+	+
creativity	+	-

So, the human resource that the Faculty of Economics and Business Administration from “Alexandru Ioan Cuza” University of Iași is developing does not have the necessary skills for operating in a competitive and uncertain environment like the one that is specific to the knowledge economy. In other words, although the future economists that graduate from this institution may be considered as being knowledge workers – if we take into account the level of knowledge and competencies that they achieve during their undergraduate studies –, they do not have the skills that any organization requires from its employees.

In this context, if the human resource is not prepared to face the challenges induced by the knowledge economy that the organization becomes vulnerable and its employees become a source of instability. In other words, the organization will not only be exposed to the risks that are coming from outside its boundaries but also to ones determined by its own incapacity of capitalizing its knowledge in a productive way.

## **5. Conclusions**

The current economy intends to be one of knowledge and this requires that organizations focus on the intangible assets and on human resources. Now more than ever, the human resources are becoming the most important element from an organization. Only through the knowledge and skills that they possess, value can be added to any other resource. In this context, higher education institution has become an influence factor of the organizational performance because it develops the ones that are going to be the future employees, researchers and innovators.

In other words, knowledge economy not only requires interconnection of world economies but also increases the dependence between business, education, research and development.

The analysis conducted revealed that in order to be competitive in the knowledge economy, organizations must adapt quickly to the market demands. This implies the existence of solid knowledge about the influence factors, anticipating trends and a very good communication at the organizational and inter-organizational level. None of these may be realized if the company doesn't have a very well qualified human resource. In other words, without developing knowledge workers a company cannot be competitive in the current business environment.

In order to discover if the economic and business higher education institutions are preparing the future employees that any company needs we developed the current research. In this process we may sustain that we had achieved all our objectives.

First of all, after analyzing the articles and studies published in the EBSCO, Science Direct and Emerald Databases we find out that the economic and business higher education should focus not only on the acquisition of knowledge but also on developing skills that will help the future graduates to adapt faster to a rapidly changing environment and to apply in practical situation everything that they know.

The most important skills that are defining a knowledge worker are the same with the ones that any company needs from its employees. So, the economic and

business higher education should focus on creating and developing *learning skills, technology skills, problem – solving skills, teamwork skills, communication skills, risk-taking skills and critical thinking*.

In the second stage of this research we had analyzed the educational programs from the Faculty of Economics and Business Administration from “Alexandru Ioan Cuza” University of Iași in order to determine the elements upon which the courses taught to the undergraduates’ level are focusing and to identify the skills developed during the years of study.

If we take into account the elements upon which the courses taught at the undergraduates’ level are focusing on than we must sustain that they are still oriented towards the acquisition of knowledge. So, no matter if we analyze the education goals, practical assignment topics or the teaching and evaluating methods, the results are the same. All the courses aim to create or to develop knowledge about the economic phenomena and specialized knowledge. Developing skills comes on the second level.

Because of the fact that the education goals and the practical assignment topics are correlated than we can sustain that the analyzed courses develop *learning skills* (100%), *the capacity of analysis and synthesis* (96.30%), *the problem – solving skills* (74.07%) and *the capacity of working with deadlines* (62.96%).

Although this is a plus for the economic and business higher education institution that had been representing the unit of analysis in this research, we have demonstrated that the most important skills that any fresh graduate should develop during his/her studies – in order to have a real contribution to company’s success in the context of the knowledge economy – are neglected. These include *using ICT skills* (the development of which is important only for 37.04% of the analyzed course despite the fact that these may help the future economists to share information with others in spite of distance), *forecasting capacity* (which is developed only through the activities that take place on 37.04% of the analyzed courses and which allows the future graduate to have a vision, to anticipate market’s evolution and to decide based on what happen and what may happen), *teamwork skills* (that are developed only in 40.74% of the cases and which facilitates knowledge dissemination and creation) and *oral communication skills* (which are developed in 44.44% of the cases and which will allow the graduates to express themselves).

As a result, we have showed that the graduates from the Faculty of Economics and Business Administration from “Alexandru Ioan Cuza” University of Iași – the third provider of economists to the labor market – have only 50% of the ideal knowledge worker characteristics, no matter the field in which they are specialized in.

In these circumstances we sustain that the economic and business higher education institutions tend to be oriented only on meeting the first condition of creating a knowledge worker – which refers to creating general and specialized knowledge. In other words, it contributes to the creation of the future knowledge worker but is not creating the ideal employee that any company needs and looks for it.

So, their goal is to create specialist, human resources who are very well informed. But the mere possession of knowledge is no longer sufficient in the current



economy. This one must be completed by developing teamwork skills which may facilitate the communication at the organizational level, but also by developing risk tolerance and the capacity of anticipating the market changes. The organizations need human resources who are able to act “here and now” but based on what may happen in the short, medium and long term.

Based on these findings, it can be sustain that the disciplines taught during the undergraduate studies should be directed towards the development of communication skills, forecasting, teamwork and using ICT. These may be achieved by reducing the share of lecture in courses in seminar for discussions, case studies and projects in which teams must be involved.

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